

CLAIMS

What is claimed as new and desired to be protected by Letters Patent of the United States is:

1. A vascular prosthesis, comprising a tube of material other than autologous vascular tissue, said tube comprising an end formation configured for surgical connection to an opening formed in a blood vessel and a narrower portion prior to commencement of said end formation, said end formation comprising an enlarged chamber adapted to induce a concave section in said blood vessel upon attachment thereto.

2. The vascular prosthesis according to claim 1, wherein said end formation further comprises a first diameter parallel to the axis of the tube and a second diameter transverse to the axis of the tube, wherein said first diameter is longer than said second diameter, said first diameter comprising a heel and a toe, wherein a transition between said tube and said toe is outwardly initially convex before a final concave portion.

3. The vascular prosthesis according to claim 1, wherein said enlarged chamber is configured to promote localized movement of blood having a non-laminar nature with a shear stress inducing relationship to a wall of said blood vessel.

4. The vascular prosthesis according to claim 2, wherein a transition between said tube and said heel is generally outwardly concave.

5. The vascular prosthesis according to claim 2, wherein opposing sides of said second diameter are generally outwardly convex.

6. The vascular prosthesis according to claim 2, wherein said first diameter is between approximately 14 and 36 mm and said second diameter is no greater than approximately 14 mm.

7. The vascular prosthesis according to claim 1, wherein said tube further comprises a second end formation.

8. The vascular prosthesis according to claim 7, wherein said second end formation comprises a second enlarged chamber having a first diameter parallel to the axis of the tube and a second diameter transverse to the axis of the tube, wherein said first diameter is longer than said second diameter, said first diameter comprising a heel and a toe, wherein a transition between said tube and said toe is outwardly initially convex before a final concave portion.

9. The vascular prosthesis according to claim 8, wherein a transition between said tube and said heel of said second enlarged chamber is generally outwardly concave.

10. The vascular prosthesis according to claim 8, wherein opposing sides of said second diameter of said second enlarged chamber are generally outwardly convex.

11. The vascular prosthesis according to claim 8, further comprising a second narrow section positioned between said tube and said second end formation, wherein a diameter of said second narrow section is less than a diameter of said tube.

12. A vascular prosthesis, comprising a tube of material other than autologous vascular tissue, said tube comprising an end formation configured for surgical connection to an opening formed in a blood vessel, said end formation comprising an enlarged chamber adapted to induce a concave section in said blood vessel upon attachment thereto.

13. A vascular prosthesis, comprising a tube of material other than autologous vascular tissue, said tube comprising an end formation configured for surgical connection to an opening formed in a blood vessel and a narrower portion prior to commencement of said end formation.